

system estimates have changed over time. The benefit of this question is that it compels utilities to begin considering long-term system needs, especially when the calculations provided in the survey show that demand is approaching supply capacity over the coming years.

*Water Shortage Response Plans as means of drought response.* A Water Shortage Response Plan (WSRP) sets the process for a municipality or other water provider to declare a water shortage and to establish protocols for reducing water usage. The WSRP defines different phases of water shortage severity and outlines appropriate responses for each phase.

After the severe 2002 drought, the North Carolina General Assembly required local government and large community water systems to include a section in their 2002 LWSPs to describe how the water system would “respond to drought and other water emergencies and continue to meet essential public water supply needs during the emergency.” The sudden requirement to include the Water Shortage Response Plans in their 2002 plans substantially delayed submission by many municipalities of their LWSPs due July 1, 2003. To further clarify content needed in the WSRPs, the Environmental Management Commission (EMC) adopted rules in March 2007 providing detailed requirements (15A NCAC 02E .0612–.0614).

Most WSRPs need a lot of work; often there is a gap in planning for what happens after enacting restrictions to limit outdoor water uses. For some municipalities, the next step is stated to be providing bottled water to customers, whereas in reality numerous options exist in the range between restricting outdoor water use and providing

bottled water. Based on new authority in Session Law 2008-143, the Division of Water Resources will be evaluating the WSRPs against a defined checklist with criteria that include enforceability, triggers to move in and out of response levels, public notification processes, authority to enact, severity of stages, and opportunity for public comment.

While reviewing the sample of 2002 plans, the reviewer noted that all of the small system plans included copies of water shortage response ordinances but did not provide documentation of approval; i.e., the ordinance provided did not have a code assigned and did not show the date of adoption. Ordinances reviewed for medium and large systems provided substantiation of adoption.

While research was under way for the 2008 Water Allocation Study, S.L. 2008-143 was approved requiring local Water Shortage Response Plans to have formal DENR approval and setting the following criteria for an approved plan:

1. The plan must have tiered levels of water conservation measures or other response actions based on the severity of water shortage conditions.
2. The tiers must result in progressively more stringent water conservation measures that correspond to increased severity of water shortage or drought conditions. *Note: A plan that lacks specific triggers for water conservation measures or makes implementation of measures optional at each step (or dependent on a decision by a public official or governing body) will not meet this requirement.*